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Healthy Riparian Areas

People: Riparian areas are attractive and inviting to forest visitors. They offer cool shade, soothing scenery, wildlife viewing, and serene waters. Fishing and water activities are major attractions. People often seek attractive water and riparian environments for recreation activities such as picnicking and camping.

Plants: The readily available water in riparian areas encourages grass and trees to grow rapidly. A pasture system that provides scheduled use of riparian areas by livestock can produce healthier animals as well as improved riparian conditions. Wise and skillful management of all uses can produce a vigorous riparian plant community and a productive aquatic community.

Forest Service Riparian Position

The Forest Service is committed to giving special attention to riparian areas. We recognize these areas as the most productive, sensitive, diverse, and often most geographically limited ecosystems within the National Forest System. Many important resources, such as fish, some wildlife, and certain vegetation communities, totally depend on the riparian areas for their existence. Forest Service policy focuses on managing for "riparian dependent resources." The natural and beneficial values of riparian areas include groundwater recharge, moderating of flood peaks, sediment reduction, visual and recreational enjoyment, timber production, forage production, wildlife habitat, and cultural resources.

The doctrine of "wise use" involves managing riparian areas under the principles of multiple use and sustained yield, while emphasizing management and improvement of soil, water, vegetation, fish, and wildlife habitat. The Forest Service accepts the challenge to fully realize values and benefits and maintain the unique features of healthy riparian areas. Goals and decisions in Forest Plans provide for maintaining and improving watershed conditions and riparian areas. These plans have long-term objectives, guidelines, and standards to maintain the unique values of riparian areas. Some areas need improved management and investment to restore values. However, the positive trend and improvement of riparian values continues and the outlook remains favorable.

You Can Help

The Forest Service has numerous volunteer opportunities. Volunteer assistance can be used to improve the management of riparian areas. This assistance can take the form of volunteer labor or direct donations. Please contact your local National Forest or District Ranger's office for more information on these volunteer programs.

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Riparian Areas— Features and Functions

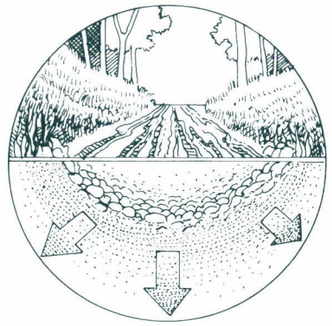
Riparian areas include the trees and other plants that live and grow near water on the banks of streams, rivers, and lakes. Many of the plants are water loving, and their roots must reach standing water at a shallow depth to complete their life cycle. The typical broad-leafed riparian trees lose their leaves in the fall. The vegetation under the trees is usually luxurious, with a wide variety of shrubs, grasses, and wildflowers. A healthy riparian area is evidence of wise land management.

Reduce Floods

Healthy riparian areas with an abundance of trees and other vegetation slow flood waters and reduce the likelihood of downstream flooding of cities and towns. This slowing of flood waters ("flood storage") allows some of the excess water to enter the underground water storage and reduces the height of the flood in downstream communities.

Improve Water Quality

When flood water overflows the banks of the stream or river, riparian vegetation slows the flood water so that it can no longer carry its load of sediment and the sediment settles out. The vegetation quickly grows through this sediment, stabilizing it with roots and covering it with plants that utilize the nutrients that could otherwise harm downstream water quality. Riparian areas also filter runoff and sediment from slopes next to the stream.



Store Water

The soils of riparian areas absorb excess water during spring snowmelt and during other flood periods. Healthy riparian areas act like a sponge and take in water readily. Often riparian areas lie over geologic fault zones. These fractures in the rock provide pathways to groundwater storage areas. Water slowed by riparian areas enters the groundwater and some of it is released later, increasing late summer and fall stream flow. Groundwater is a vital and renewable resource. We rely on it for much of our water supply.

Cool and Shade

Riparian areas produce an abundance of cover and shade. The shade keeps water temperatures cool for fish and water-loving animals. The vegetation cover provides shelter, food, and temperature relief for many birds and other animals.

Riparian Areas Benefit . . .

Birds: Riparian areas are a home to a variety of birds ranging in size from the hummingbird to the eagle. These birds find food, cover, and nesting sites in riparian areas. Many birds depend on riparian areas to complete their life cycle. Rapidly growing riparian vegetation produces a multistoried habitat. Older trees often have holes or cavities that provide homes.

Animals: Many animals visit and live in riparian areas. They come for water, food, and relief from extremes in temperature. Riparian areas often provide sheltered pathways upstream and downstream to other habitats. Beavers, otters, and other water-loving animals depend upon riparian areas for their habitat. Riparian areas often provide the key resources that support biological diversity both in the riparian area and nearby uplands.

Fish: Fish depend upon healthy riparian area conditions. Healthy riparian areas provide stable channels, sustained water supply; clean, cool water; food; shelter under overhanging banks; and vegetation. The overhanging vegetation is a home for insects and produces vegetative matter that provides a key food source for fish and other aquatic life in the food chain.